



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AUG 17 2015

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Rhonda Turner
Environmental Plant Compliance Engineer
Ford Motor Company – Chicago Assembly Plant
12600 South Torrence Avenue
Chicago, Illinois 60633

Re: Notice of Violation
Ford Motor Company – Chicago Assembly Plant
Chicago, Illinois

Dear Ms. Turner:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation (NOV) to Ford Motor Company – Chicago Assembly Plant (you) under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1). We find that you have violated the Illinois State Implementation Plan at your Chicago, Illinois, facility.

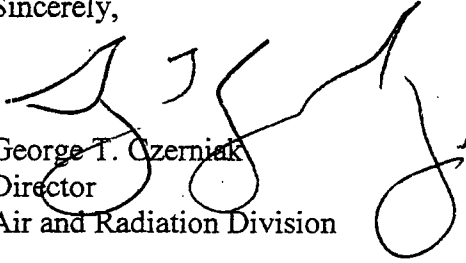
Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the NOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Eleanor Kane. You may call her at (312) 353-4840 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,



George T. Czerniak
Director
Air and Radiation Division

Enclosure

cc: Eric Jones, IEPA

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

Ford Motor Company
Chicago, Illinois

Proceedings Pursuant to
Section 113(a)(1) of the
Clean Air Act, 42 U.S.C.
§ 7413(a)(1)

NOTICE OF VIOLATION

EPA-5-15-IL-12

NOTICE OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation under Section 113(a)(1) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(1). EPA finds that Ford Motor Company (Ford) is violating the Illinois State Implementation Plan (SIP) at the Chicago Assembly Plant (CAP) as follows:

Statutory and Regulatory Background

1. Section 110 of the CAA, 42 U.S.C. § 7410, requires each state to adopt and submit to EPA for approval a SIP that provides for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standards (NAAQS).
2. Under Section 110(a)(2) of the CAA, 42 U.S.C. § 7410(a)(2), each SIP must include a permit program to regulate the air pollution emissions of any stationary source as necessary to assure that NAAQS are achieved. Pursuant to Section 113(a) and (b) of the CAA, 42 U.S.C. § 7413(a) and (b), upon EPA approval, SIP requirements are federally enforceable under Section 113. See also 40 C.F.R. § 52.23.
3. On May 31, 1972, EPA approved the Illinois SIP, including a program for issuing federally enforceable construction permits. Federal Register, Vol. 37, No. 105, page 10862.
4. Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), authorizes the Administrator to initiate an enforcement action whenever, among other things, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of an applicable implementation plan or permit.

Ford CAP Permits

5. Ford CAP operates under a Title V Permit issued by the Illinois Environmental Protection Agency (IEPA) on April 7, 2000.
6. On September 10, 2009, the IEPA issued Construction Permit Number 08090067 (2009 Permit) to Ford CAP, allowing modifications to the facility's Paint Shop, and

requiring the construction of an air pollution control system to offset VOC emission increases.

7. The 2009 Permit required the installation and operation of a new air pollution control system consisting of a carbon wheel concentrator (concentrator) and a regenerative thermal oxidizer (RTO), operated in series. This new equipment controls emissions from the topcoat application operations. Emissions from the top coat oven were to be controlled by an existing RTO.
8. Condition 1.1.7(a) of the 2009 Permit required that Ford conduct a performance test of, among other things, the existing topcoat afterburner within 120 days of initial startup of the new RTO and concentrator. This requirement applies to the RTO serving the topcoat oven.
9. On February 24, 2011, the IEPA issued Construction Permit Number 10120009 (2011 Permit) to Ford CAP, allowing additional modifications to the Paint Shop and to the associated pollution control system installed pursuant to the 2009 Permit.
10. Condition 1.5 of the 2011 Permit requires VOC emissions from the affected topcoat operation be reduced by 60 percent overall (combination of capture and control efficiency).
11. Condition 1.8(b) of the 2011 Permit requires that Ford CAP record all 3-hour periods during which the average VOC concentration measured at the concentrator's breakthrough monitor is more than 10ppm and 20 percent greater than the average concentration, measured during the most recent determination of the recovery efficiency of the carbon adsorber, which determination demonstrated that the operation was in compliance.
12. Condition 1.10(a)(ii) of the 2011 Permit requires that Ford CAP notify IEPA of deviations by the affected topcoat operations within 30 days.

Factual Background

13. Ford owns and operates an automobile assembly plant located at 12600 South Torrence Avenue, Chicago, Illinois. The plant is known as the Chicago Assembly Plant (CAP).
14. Ford CAP is a major source of volatile organic compound (VOC) emissions under Title V and the Program for the Prevention of Significant Deterioration (PSD).
15. EPA issued Ford CAP a Request for Information under Section 114 of the CAA on February 10, 2015.
16. Ford CAP submitted responses to the Request for Information on March 18, 2015, and May 10, 2015.

17. The topcoat operation at Ford CAP consists of two parallel lines. Vehicles in each line are first coated with the basecoat through a series of controlled and uncontrolled sections. They are then coated with a clearcoat through a series of controlled and uncontrolled sections. The controlled zones of the basecoat and clearcoat application are controlled by a carbon wheel concentrator and an RTO, in series. After both coats have been applied, the vehicles go to the topcoat ovens which are controlled by a dedicated RTO.
18. The most recent performance test establishing the destruction efficiency of the topcoat oven RTO was conducted on November 11, 1994. The test results show a destruction efficiency of 95.93 percent.
19. On March 30, 2011, Ford CAP tested the capture and control efficiency of emissions from the topcoating operations. The testing showed a booth capture efficiency of 65.56 percent at the basecoat and 44.56 percent of the clearcoat. The testing also assessed the capture efficiency of the topcoat ovens, which was 11.7 percent for basecoat and 32.3 percent for clearcoat.
20. On April 13, 2011, additional testing at Ford CAP demonstrated a removal efficiency of 99.2 percent at the concentrator and a destruction efficiency of 96.6 percent at the RTO. The VOC breakthrough measured at the monitor during the test was less than 5 ppm.
21. Based on the testing outlined in paragraphs 18 through 20, above, the total system control efficiency from April 13, 2011, through March 6, 2012, can be summarized and calculated as shown in the following table:

	Topcoat Booths			Topcoat Oven		Total Topcoat Control Eff
	Booth Capture Efficiency	C-Wheel Removal Efficiency	RTO Destruction Efficiency	Capture Efficiency	RTO Destruction Efficiency	
Basecoat	65.6%	96.6%	99.2%	11.7%	95.9%	74.0%
Clearcoat	44.6%	96.6%	99.2%	32.3%	95.9%	73.7%

22. From January 1, 2012, through March 6, 2012, 15 percent of the three-hour average concentration readings recorded at the breakthrough monitor were greater than 10ppm and more than 20 percent above the breakthrough concentration measured during the most recent compliance test of the removal efficiency at the concentrator.
23. On March 7, 2012, after modifications were made per the 2011 Permit, Ford CAP conducted performance testing and demonstrated a removal efficiency of 88.2 percent at the concentrator and a destruction efficiency of 99.1 percent at the RTO. The VOC breakthrough measured at the monitor was 17.3 ppm during the test.

24. Based on the testing outlined in paragraphs 18, 19, and 23, above, the total system control efficiency from March 7, 2012, to September 25, 2014, can be summarized and calculated as shown in the following table:

	Topcoat Booths			Topcoat Oven		Total Topcoat Control Eff
	Booth Capture Efficiency	C-Wheel Removal Efficiency	RTO Destruction Efficiency	RTO Capture Efficiency	RTO Destruction Efficiency	
Basecoat	65.6%	88.2%	99.1%	11.7%	95.9%	68.5%
Clearcoat	44.6%	88.2%	99.1%	32.3%	95.9%	69.9%

25. From March 7, 2012, through December 31, 2012, 12 percent of the three-hour average concentration readings recorded at the breakthrough monitor were greater than 10ppm and more than 20 percent above the breakthrough concentration measured during the most recent compliance test of the removal efficiency at the concentrator.
26. Between January 1, 2012, and December 31, 2012, Ford CAP did not report any deviations at the concentrator breakthrough monitor to the IEPA.

Violations

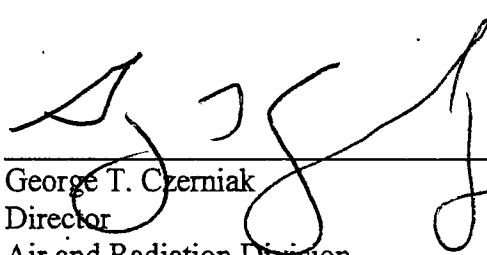
27. Ford CAP violated Condition 1.1.7(a) of the 2009 Permit by failing to conduct a performance test of the RTO controlling the topcoat oven.
28. From January 1, 2012, through December 31, 2012, Ford CAP violated Condition 1.5 of the 2011 Permit by failing to operate the concentrator to achieve the removal efficiency demonstrated during the April 13, 2011, and March 7, 2012, compliance tests.
29. From January 1, 2012, through December 31, 2012, Ford CAP violated Condition 1.10(a)(ii) of the 2011 Permit by failing to notify IEPA of deviations by the affected topcoat operations within 30 days.

Environmental Impact of Violations

30. These violations have caused excess emissions of VOC, which contribute to the creation of ground level ozone. Breathing ozone contributes to a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level ozone also can reduce lung function and inflame lung tissue. Repeated exposure may permanently scar lung tissue.

Date

8/12/15


George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice of Violation, No. EPA-5-15-IL-12, by

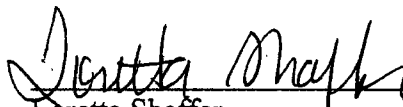
Certified Mail, Return Receipt Requested, to:

Rhonda Turner
Environmental Plant Compliance Engineer
Ford Motor Company – Chicago Assembly Plant
12600 South Torrence Avenue
Chicago, Illinois 60633

I also certify that I sent a copy of the Notice of Violation by first-class mail to:

Eric Jones, Manager
Compliance Unit
Bureau of Air
Illinois Environmental Protection Agency
P.O. Box 19506
Springfield, Illinois 62794-9506

On the 19 day of August 2015.



Loretta Shaffer
Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7011 1150 0000 2640 5465